INDEX.

PAGE.

BAKER, M. Alhazen's Problem 327
CAYLEY, A. On the 34 Concomitants of the Ternary Cubic 1
Specimen of a Literal Table for Binary Quantics, otherwise a Partition Table . . 248
On the Analytical Forms called Trees 266
On the 8-square Imaginaries 292
Tables for the Binary Sextic 379
CRAIG, T. On certain Metrical Properties of Surfaces 297
On the Counter-Pedal Surface of the Ellipsoid 358
CROFTON, M. W. Note on Symbols of Operation 269
FRANKLIN, F. Note on Newton's Method of Approximation 275
GLASHAN, J. C. Simple and Uniform Method of obtaining Taylor's, Cayley's, and Lagrange's Series 277
Forms of Rolle's Theorem 281
HILL, G. W. Note on Hansen's General Formulae for Perturbations 256
LADD, CHRISTINE. Note on Segments made on Lines by Curves 272
MCCLINTOCK, E. On certain Expansion Theorems 16
On the Remainder of Laplace's Series 96
MITCHELL, O. H. Some Theorems in Numbers 25
Note on Determinants of Powers 341
MUIR, T. Note on the Multiplication of the $(n-1)^{th}$ Power of a Symmetric Determinant of the n^{th} order by the Second Power of any Determinant of the Same Order . 273
NEWCOMB, S. Note on the Frequency of Use of the Different Digits in Natural Numbers 39
PEIRCE, B. Linear Associative Algebra. With Notes and Addenda by C. S. PEIRCE, son of the Author 97
PEIRCE, C. S. On the Logic of Number 85
STORY, W. E. On the non-Euclidean Trigonometry 332
STRINGHAM, W. I. Determination of the Finite Quaternion Groups 345
SYLVESTER, J. J. Tables of the Generating Functions and Groundforms of the Binary Duodecimic, with some General Remarks, and Tables of the Irreducible Syzygies of Certain Quantics 41
A Demonstration of the Impossibility of the Binary Octavic possessing any Groundform of deg-order 10.4 62
On Tchebycheff's Theory of the Totality of the Prime Numbers comprised within Given Limits 230
On the Solution of a certain class of Difference or Differential Equations . . 260
Note on the Theory of Simultaneous Linear Differential or Difference Equations with Constant Coefficients 321
Note on Mechanical Involution 336

ERRATA.

Page 54, line 7. For *collect-groups* read *generator-groups.*

" 106, § 31. The first formula should read $(A \pm B)\, C = AC \pm BC$.

" 126. The third formula should read $k(i - k) = j$.

" 132. Foot-note, second line of second paragraph, read $j = \frac{1}{2}(j_1 - \mathbf{J}k_1)$, $l = \frac{1}{2}(1 + \mathbf{J}i_1)$.

" 136. Last line of foot-note. For e, read l.

" 148. Multiplication table of (l_5). For $ji = i$, read $ji = j$.

" 171. Last line of foot-note, insert l, at beginning of line.

" 182. Foot-note. Add that on substituting $k + \mathbf{r}j$ for k, the algebra (aw_5) reduces to (ax_5), and the same substitution reduces (ay_5) to (az_5).

" 187. Last line of foot-note. For i, read l.

" 246, line 14. After the word *that* insert *with a value of h capable of being made less than any assignable quantity.*